1145-03-681 Francis Adams* (fadams@gsu.edu), Department of Mathematics and Statistics, Georgia State University, 25 Park Place 14th Floor, Atlanta, GA 30303. Injection structures and the Ershov hierarchy.

We investigate properties of injections structures related to the Ershov hierarchy. In particular, we provide a finer analysis of the effective categoricity of Δ_2^0 -categorical injection structures. A substantial amount of machinery and background results are provided by work of Remmel and others on computability and categoricity of injections structures [1], and on equivalence structures in the Ershov hierarchy [2].

[1] Cenzer, Douglas, Valentina Harizanov, and Jeffrey B. Remmel. "Computability-theoretic properties of injection structures." Algebra and Logic 53.1 (2014): 39-69.

[2] Cenzer, Douglas, Geoffrey Laforte, and Jeffrey Remmel. "Equivalence structures and isomorphisms in the difference hierarchy." The Journal of Symbolic Logic 74.2 (2009): 535-556. (Received September 12, 2018)